

SPECIAL FOCUS

Regional Macroeconomic
Implications of COVID-19

The rapid rise of COVID-19 cases, together with the wide range of measures to slow the spread of the virus, has slowed economic activity precipitously in many emerging market and developing economies (EMDEs). Economic disruptions are likely to be more severe and protracted in those countries with larger domestic outbreaks, greater exposure to international spillovers (particularly through exposure to global commodity and financial markets, global value chains, and tourism), and larger pre-existing challenges such as informality. Growth forecasts for all regions have been severely downgraded; Latin America and the Caribbean (LAC) and Europe and Central Asia (ECA) in particular have large downgrades partly because of the size of their domestic outbreaks and exposure to global spillovers, while South Asia's substantial downgrade is primarily the result of stringent lockdown measures. Many countries have avoided more adverse outcomes through sizable fiscal and monetary policy support measures. Despite these measures, per capita incomes in all EMDE regions are expected to contract in 2020, likely causing many millions to fall back into poverty.

Introduction

With the epicenter of the COVID-19 pandemic moving from EAP to advanced economies—particularly in Europe and the United States—outbreaks among most EMDEs initially lagged those in these major economies. However, since mid-March, the number of confirmed infections in all EMDE regions has been rising sharply.¹ To mitigate the spread, more than 100 EMDEs have closed schools, many have banned public gatherings, imposed national or regional lockdowns, and banned international travel.

While these measures are necessary, they have severely disrupted economic activity among EMDEs. The magnitude of disruption varies, however, according to the scale of the domestic outbreak, the vulnerability of the economy to spillovers from global weakness, and the severity of pre-existing issues such as debt and informality. In response, EMDE central banks and governments have implemented a wide range of policy measures to limit the economic and financial fallout.

In this context, this special focus addresses the following questions:

- How has the pandemic evolved across EMDE regions?
- How have regional vulnerabilities affected regional economic developments?
- What policy measures have regions adopted?
- What impact will the pandemic have on regional growth, per capita incomes and poverty?
- What are the key risks to regional growth outlooks?

Recent reports from international institutions have provided an initial assessment of the impact of the pandemic on regional prospects (ADB 2020; EDB 2020; IDB 2020; IMF 2020; World Bank 2020a, 2020b, 2020d, 2020e, 2020f). These publications converge on several common points: the pandemic will have a large impact through multiple channels, no region will be unaffected, growth forecasts are highly uncertain, and support from policymakers is essential. This special focus builds on the existing regional analysis with the following specific contributions. First, it provides an up-to-date, concise, and cross-regional update of the latest developments. Second, it discusses how important vulnerabilities—such as exposure to commodity and financial markets, global value chains and tourism, as well as informality—differ by region. Third, it summarizes the health, monetary and fiscal policy responses in each region. Finally, it assesses how the combination of incoming information, pre-existing data, and policy responses combine into a forecast for regional growth, with important implications for the poverty outlook.

Note: This Special Focus was prepared by Patrick Kirby and Rudi Steinbach. The box on the impact of COVID-19 on global value chains was prepared by Patrick Kirby and Maryla Maliszewska, and includes simulation results prepared by Maryla Maliszewska, Aaditya Mattoo, and Dominique van der Mensbrugge. Research assistance was provided by Yushu Chen, Hrisyana Doytchinova, Fuda Jiang, Maria Hazel Macadangdang, Julia Renee Roseman Norfleet, Ceylan Oymak, Vasiliki Papagianni, Maria Filipa Seara E. Pereira, and Kaltrina Temaj.

¹The World Bank groups EMDEs into six geographical regions. They are East Asia Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SAR), and Sub-Saharan Africa (SSA).

The pandemic and health policy responses

Spread of the pandemic. As of early June, there have been over 6 million confirmed COVID-19 cases globally, of which almost one-half are in EMDEs (Figure 2.1.1.A). The rising number of infections in EMDEs represents a third global wave of COVID-19 outbreaks, following an initial wave in China and neighboring countries that has largely subsided and a second wave in advanced economies that is slowing. The scale of the EMDE wave is likely being substantially understated, as testing capacity is limited in EMDEs—when available, tests are often restricted to include only patients with existing symptoms or those who have been in contact with a known case (Figure SF.1.B and SF.1.C). About 100,000 deaths in EMDEs have been attributed to COVID-19 but this too may be an under-estimate given generally weaker health care capacity and difficulties in tracing deaths outside of hospitals. Excess mortality statistics suggest such under-estimation could be large.

Cases first mounted in East Asia Pacific (EAP) and the Middle East and North Africa (MENA) (especially the Islamic Republic of Iran) but have since then spread rapidly in other regions, with Sub-Saharan Africa (SSA) lagging. At this point, the largest regional outbreak is in LAC, followed closely by ECA.

- **EAP.** In EAP, there are currently about 140,000 confirmed COVID-19 cases as the virus has spread rapidly within some of the region's large economies. In addition to the 84,000 cases in China, notable outbreaks are occurring in Indonesia, the Philippines, and Malaysia, with a combined 55,000 cases. Close to 7,500 people in the region are reported to have died from the virus. Most economies in the region contracted in the first quarter—including China, where output fell 35 percent (q/q saar) in 2020Q1, the first drop since 1976. While China's purchasing manager indexes (PMIs) partially rebounded at the start of the second quarter, those in other countries reached unprecedented lows in April; manufacturing PMIs in Indonesia, Malaysia, and the Philippines fell to 27.4, 31.2, and 31.6, respectively.
- **ECA.** Europe and Central Asia (ECA) has the second largest outbreak, after Latin America and the Caribbean (LAC), with 770,000 cases, of which about one-half are in Russia and a further one-fifth in Turkey. The virus has been confirmed as the cause of 15,000 deaths in the region, but excess mortality statistics suggest the true human toll could be much higher. PMIs in the region fell sharply in April as the pandemic spread: The manufacturing indexes for Poland, Russia, and Turkey fell to 31.9, 31.3, and 33.4, respectively.
- **LAC.** The region initially accounted for a small share of COVID-19 cases in EMDEs but has recently become the new epicenter as outbreaks in the region have spread rapidly. Of the region's roughly 1 million infections, one-half are in Brazil. Large outbreaks are also occurring in Peru, Chile, Mexico, and Ecuador. More than 50,000 deaths have been officially reported as a result of the virus. Activity in Mexico fell 6.2 percent in 2020Q1 (q/q saar), while the composite PMI for Brazil fell to 26.5 in April.
- **MENA.** In MENA, the virus was first recorded in the United Arab Emirates in late January, but began spreading rapidly in Iran after the first cases were identified there mid-February. The region currently has about 450,000 confirmed cases, of which around one-third are in Iran. Sizable outbreaks have also occurred in Saudi Arabia (87,000), Qatar (58,000), and the United Arab Emirates (35,000). Over 11,000 people in the region are reported to have lost their lives due to the virus. Non-oil activity has decelerated sharply in large regional economies.
- **SAR.** The pandemic reached SAR later than some other regions, but the incidence of cases is rising rapidly. The number of confirmed COVID-19 cases has risen to around 350,000, with more than 8,000 people having died as a result. While limited testing capacity may understate the true scale of the regional

outbreak, the majority of infections in the region are in India (200,000), Pakistan (70,000), and Bangladesh (50,000). Nationwide lockdowns in these three largest regional economies sharply curtailed activity in the services sector and manufacturing production.

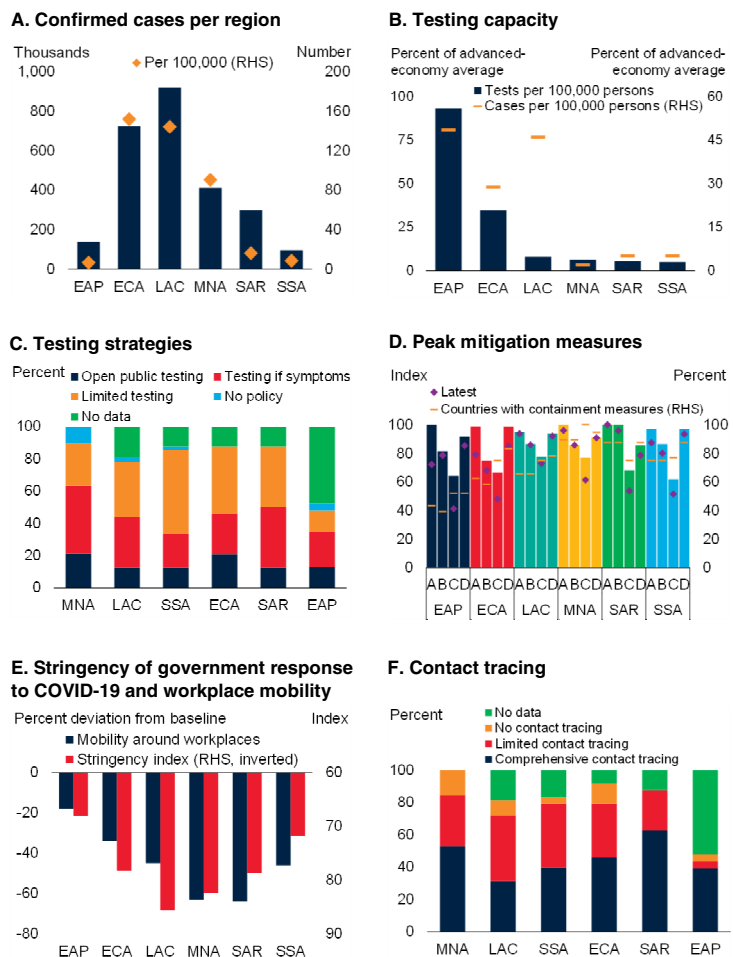
- **SSA.** In SSA, confirmed COVID-19 cases have also lagged those in other regions—partly reflecting limited testing capacity—but they are gathering significant pace. There currently have been more than 100,000 cases of the virus in the region, with sizable outbreaks in South Africa (34,000), Nigeria (10,500), Ghana (8,000), and Cameroon (6,500). However, challenges due to limited testing capacity are particularly acute in SSA, even more so in rural areas, likely understating the true number of infections. In Nigeria and South Africa—the two largest economies in the region—activity has fallen precipitously during the first half of this year, with the composite PMIs falling to 25.5 and 23.7 in April, respectively.

Mitigation measures. To help mitigate the spread of the virus, most EMDEs have implemented necessary but severely disruptive measures (Figure SF.1.D). These have included school closures in more than 100 countries, restrictions on non-essential business activities, prohibitions of public gatherings, suspension of public transport, restrictions on movement, border closures, and travel bans. Traffic data show that regions with more stringent containment measures have less activity around workplaces (Figure SF.1.E).

Many EMDEs face challenges in implementing some of these measures. In regions such as SAR and SSA, where the majority of workers are in the informal economy and depend on daily incomes that are insufficient to stockpile food and other essential items, social-distancing and self-isolation are difficult to implement (World Bank 2019a). In many countries, living conditions are also not suited to these measures, especially for those who live in crowded slums, and where necessities like water are often accessed at communal points (World Bank 2020a).

FIGURE SF.1 COVID-19 outbreaks

The number of confirmed COVID-19 cases is rising rapidly among EMDEs, with ECA and LAC becoming the new epicenters. However, limited testing capacity is likely understating the true intensity of outbreaks in many countries. To help mitigate the spread of the virus, most EMDEs have imposed necessary, but economically disruptive, mitigation measures. These measures have involved school closures, lockdowns at regional and national level, and travel bans.



Source: Hale et al. 2020; Johns Hopkins University; Oxford University; Our World in Data; World Bank. Note: EMDE = Emerging Market and Developing Economies, EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.
 A. Last observation is May 29, 2020.
 B. Bars reflect tests per 100,000 people in each region (for countries that report testing data) as a percent of those in advanced economies. Red markers reflect confirmed COVID-19 cases per 100,000 people in each region as a percent of those in advanced economies. For tests (cases), the sample includes the following number of economies per region: EAP 6 (13); ECA 11 (22); LAC 12 (32); MNA 5 (19), SAR 4 (8), and SSA 9 (46). Last observation is May 28, 2020.
 C. “Open public testing” is aggressive testing such as in a “drive-through” and available to everyone. “Testing if symptoms” refers to testing anyone who shows COVID-19 symptoms. “Limited testing” is when an individual is showing symptoms and meets a specific criterion (e.g. key workers, admitted to hospital, came in contact with a known case or came from overseas). “No policy” refers to having no testing policy in place. Last updated on May 29, 2020. Individual countries may be several days older.
 D. Bars shows the peak level of stringency imposed for each containment measure from January to May. The diamond markers indicate the latest level of stringency for each measure. The yellow lines indicate the share of countries who have recommended or implemented the containment measure, without weighting by the level of stringency or whether the measure was targeted to a region or was at the national level. Each letter on the x-axis corresponds to a containment measure. A = School closings, B = Restrictions on gatherings, C = Stay-at-home requirements, and D = Restrictions on international travel. The sample includes 154 EMDEs. Last observation is May 29, 2020.
 E. Aggregates are calculated as medians. Sample includes 97 EMDEs for mobility and 136 EMDEs for stringency. Last observation is May 25, 2020. Individual countries may be several days older.
 F. “Limited contact tracing” is tracing not done for all cases. “Comprehensive contact tracing” is tracing of all cases. Last observation is May 29, 2020. Individual countries may be several days older.
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Survey indicators suggest the most stringent measures have been implemented in MENA but even in SSA, with limited state capacity, mitigation measures have been introduced on a broad scale. The most commonly used measures across EMDEs have been international travel restrictions (74 percent of countries), shelter-in-place orders and restrictions on internal mobility (71 percent), and school closures (68 percent).

Of these measures, international travel restrictions, shelter-in-place requirements, and restrictions on internal mobility have been most broadly imposed in MENA, LAC, and SSA. School closures have been particularly broad-based in MENA, where virtually all countries have imposed such measures, as well as in SAR and SSA (more than 85 percent). Many countries have also imposed restrictions on the use of public transport, particularly in MNA (95 percent), SAR (89 percent) and LAC (69 percent). Cancellation of public events and restrictions on the size of public gatherings have been more stringent in MENA, LAC, SSA, and ECA. Restrictions on non-essential work have been broad-based in MENA and LAC, but imposed in only about one-half of countries in EAP and SSA.

To further help prevent the domestic spread of COVID-19, many countries have supplemented these social distancing measures with public information campaigns, broad-based testing, and contact tracing of individuals who were potentially exposed to known cases. Contact tracing has been most comprehensive in ECA, EAP and MENA (Figure SF.1.F).

- **EAP.** Measures to mitigate the spread in these economies have included the prohibition of mass gatherings, school closures, restrictions on internal movement, shelter-in-place orders, and travel restrictions, but have been less broadly imposed than in other regions (World Bank 2020b).
- **ECA.** In response to domestic outbreaks, 20 of the 24 countries in ECA have closed schools since mid-March, and many have shut international borders, issued shelter-in-place orders, closed public transport, recommended
- or required closing of non-essential businesses, and restricted travel from heavily hit areas.
- **LAC.** The majority of countries have closed schools and partially or completely shut their borders to foreigners. Numerous countries (Argentina, Chile, Colombia, Ecuador, Honduras, Peru, Venezuela) have mandated business closures and imposed large-scale mobility restrictions. Some countries have embarked on comprehensive contact tracing efforts, but such measures have generally been limited in most of the region.
- **MENA.** From late February, widespread and highly stringent mitigation measures have been implemented to help limit the spread of infection. These include curtailing the size of public gatherings, air travel restrictions in the Gulf Cooperation Council (GCC) that brought tourism to a halt, cancellation of large international events, closing schools throughout the region, and shelter-in-place requirements orders.
- **SAR.** International travel bans and school closures have been widespread in SAR economies. Public transport has also been closed in two-thirds of countries. Near total lockdowns in several regional economies severely hindered mobility and impeded delivery of essential services. In Bangladesh, large sections of the workforce left major cities to return to their villages. Non-essential businesses have been closed in Pakistan, and airports have been shut for arrivals in Sri Lanka.
- **SSA.** Stringent measures to mitigate the pandemic's spread have been implemented in most countries. These include school closures, travel bans, border closures—national and provincial in some—and lockdowns of entire countries or in other cases large cities. While shelter-in-place orders have been broad-based, they have still accommodated essential trips. In about 6 percent of countries in the region, closing of non-essential businesses has been recommended, as opposed to required (Malawi, Mauritania, Somalia).

Regional vulnerabilities to health and economic stress

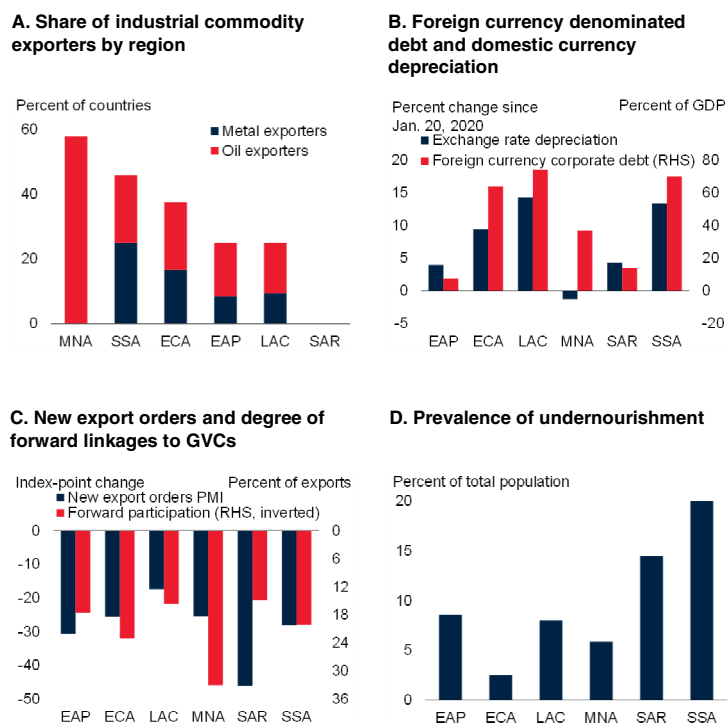
The combination of COVID-19 outbreaks, restrictions to reduce the pandemic’s spread, and spillovers from the global recession is disrupting activity for all EMDE regions. The magnitude of the disruptions varies, however, according to the scale of the domestic outbreak, the vulnerability of the economy to spillovers from global economic and financial stress, the severity of pre-existing challenges such as widespread poverty and informality, and the degree to which debt levels constrain the fiscal response. Growth forecasts and equity market valuations have fallen most steeply in LAC.

Exposure to commodity market disruptions. Dependence on commodity exports currently constitutes a severe vulnerability. COVID-19 has caused a sharp fall in global commodity demand, and thus prices, with oil prices down 60 percent since late January and many metals prices down by about 20 percent (Chapter 4). Commodity prices are projected to remain low in the near term. The decline in commodity prices has undermined government and export revenues for industrial-commodity exporting EMDE regions, where commodities accounted for more than 75 percent of exports in 2019, on average. MENA and SSA have the largest proportion of such countries (almost 60 percent and almost half, respectively). More than a third of countries in ECA are industrial commodity exporters, as are a quarter of those in EAP and LAC (Figure SF.2.A).

Exposure to global financial market stress. COVID-19 has also led to widespread financial turbulence and record capital outflows, while foreign direct investment in many countries is expected to fall considerably. Since the global financial crisis, debt loads have risen sharply, with EMDE debt reaching a historic high of 170 percent of GDP in 2019. In almost 40 percent of EMDEs, government debt is now at least 20 percentage points of GDP higher than it was in 2007 (Kose et al. 2019). These figures are set to rise further through a combination of lower revenues, larger expenditures, and higher borrowing costs, especially for foreign-currency-denominated debt.

FIGURE SF.2 Regional vulnerabilities and economic impacts

Dependence on commodity exports constitutes a severe vulnerability for many regions. Incoming data suggest that some of the worst-affected countries are commodity exporters integrated in GVCs through forward linkages. Domestic-currency depreciation makes it more challenging to finance foreign-currency-denominated debt. Informal workers are likely to find it difficult to smooth lost income and adapt to food shortages, which will worsen existing malnutrition.



Source: Haver Analytics; Organisation for Economic Co-operation and Development; World Bank.
 Note: EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.
 B. Data for foreign currency denominated corporate debt are 2019Q3. Aggregates are calculated as unweighted averages. Sample includes 21 EMDEs for exchange rates and 22 EMDEs for corporate debt. Last observation is May 29, 2020.
 C. GVC = global value chain. PMI = Purchasing Managers' Index. Figure shows change in new export orders PMI since January 2020. Forward participation indicates share of exports for the region that are inputs for other region's to further process and then re-exported as finished goods. Data for forward participation are 2015. Aggregates are calculated using the median for PMI and nominal U.S. dollar exports for forward participation. Last observation is April 2020 for new export orders PMI.
 D. Undernourishment is defined as the share of population whose food intake is insufficient to meet dietary energy requirements on a continuous basis.
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- **Governments.** Risk premia for sovereign bonds in LAC rose especially sharply during March, with investors differentiating according to credit risk. In Argentina, there has been ongoing negotiations around debt restructuring between the government and bond holders. Many countries in the region have sought out lending from official sources to avoid debt servicing difficulties and balance of

payment pressures. In SSA, sovereign borrowing spreads have risen in South Africa, as sovereign debt lost its investment-grade rating. By contrast, the increase in borrowing costs in EAP has been less pronounced reflecting robust monetary, prudential, and fiscal policy frameworks.

- *Corporates.* More than a quarter of corporate debt in the average EMDE is denominated in foreign currency. Regions with greater exposure to foreign-currency corporate debt—ECA, LAC, and SSA—have tended to have larger currency depreciations, increasing debt service burdens (Figure SF.2.B). Informal SMEs, which are especially prevalent in SAR and SSA, face a different problem: they often face significant financing constraints that prevent them from accessing the lending that would help keep them afloat during periods of economic weakness.
- *Financial systems.* The ability of banking systems to withstand financing shocks varies across regions. While MENA countries in the Gulf Cooperation Council entered the crisis with relatively sound financial system buffers, SAR entered the crisis with weaker financial sector balance sheets.
- *Households.* Lost incomes are expected to weigh heavily on households, and may lead to difficulties with debt servicing which may migrate to the financial system, for example through a spike in mortgage defaults. Household are also expected to lose incomes through falling remittances (World Bank 2020c). Recessions in the Euro Area and Russia will weigh on remittance inflows to ECA, which averaged 10 percent of GDP in 2019 and were as high as 30 percent for some countries. Similarly, the deep U.S. recession will substantially reduce remittances to Central America, while weakness in oil-exporting MENA countries will likely have the same impact for countries in SAR and EAP that supply many guest workers. In addition to lost work for migrants, many money transfer agencies in either the origin or recipient countries have closed as a result of lockdown measures.

Exposure to global value chains. Regions are also exposed to global spillovers through their participation in global value chains, which account for about half of global trade and can propagate international shocks (Box SF.1). Regions with a greater prevalence of forward linkages such as ECA, MENA (mostly through oil), and SSA have experienced substantial falls in demand and prices for their exports (Figure SF.2.C).² Regions with a preponderance of backward linkages, such as EAP and ECA, are vulnerable to disruptions in production abroad leading to shortages of critical inputs. PMIs in these regions have declined sharply: in Vietnam and Poland, for example, the headline PMI dropped 28 and 27 points between January and April, respectively. In LAC, the abrupt slowdown in China's economy disrupted supply chains for Mexico and Brazil and caused a sharp drop in exports from commodity-producing economies. In ECA, supply chain disruptions and falling demand have caused a collapse in exports from the auto sector among the countries in Central Europe and the Western Balkans (Bulgaria, Hungary, Poland, Serbia). While it is less integrated in global value chains than some other regions, SAR has experienced disruptions in its textile, garments, and auto sectors.

Exposure to tourism. Regions that rely on tourism are being adversely affected by widespread travel restrictions and the associated collapse in tourist arrivals in the first half of 2020. They also face large declines in services activity, particularly in food, entertainment, and retail services. This is particularly important for many EAP and LAC countries, such as both regions' small island economies. Travel bans and changes in consumer behavior have led to a collapse in the number of visitors to popular tourist destinations such as the Caribbean, North Africa, Southern Europe, and Pacific Island countries, among others. In all, global tourism is set to contract by about two-thirds in March, which will weigh heavily on

² Countries with forward linkages are those whose exports are not fully absorbed in the importing country and are instead embodied in the importing country's exports to third countries (World Bank 2019b). Countries with backward linkages are those whose exports embody value added previously imported from abroad, such as auto or electronics manufacturers, that process and then export inputs from abroad.

BOX SF.1 The impact of COVID-19 on global value chains

One of the ways that the COVID-19 pandemic is disrupting economic activity is through its impact on global value chains (GVCs), which can amplify the effects of shocks on trade, production, and financial markets. Workplace closures or transportation difficulties have caused interruptions to the delivery of intermediate goods, severely affecting production in manufacturing industries that practice lean inventory management. Governments have become concerned about shortages of essential products from offshore sources. A simulation of the current crisis using a model with input-output linkages suggests that all countries and almost all sectors will suffer a decline in exports, with worse outcomes in regions more dependent on international trade, particularly through GVCs and tourism. In the wake of this shock, firms as well as countries may seek to reduce the risk exposure of supply chains over the medium term by increasing the geographical diversity of their suppliers. Countries that wish to seize this opportunity to become more integrated into GVCs could pursue sound government policies with respect to infrastructure investment, education, and public health. The benefits to real incomes and welfare associated with GVC production have been large, but could be undermined by a rise in protectionism.

Introduction

The COVID-19 pandemic is causing the worst contraction in global trade in the post-war era. One important channel for its impact is through global value chains (GVCs). Industries that participate in GVCs are often dependent on “just-in-time” delivery of intermediate inputs. This contributes to lean inventories and higher productivity, but also makes companies vulnerable to interruptions in the supply of critical components from abroad, such as those that have occurred as a result of the regional quarantines, production shutdowns, and border controls implemented to slow the spread of COVID-19. In this context, this box addresses the following questions:

- How has COVID-19 disrupted GVCs?
- How might disruptions to GVCs amplify the impact of COVID-19?
- Which countries and sectors are more vulnerable?

How has COVID-19 disrupted GVCs?

Even before COVID-19, the growth in GVCs had already been trending lower. GVC’s share of global trade peaked at just over 50 percent prior to the global financial crisis, but slipped thereafter as activity slowed, particularly that of investment, and as trade liberalization efforts stalled (World Bank 2019b). More recently, GVCs had been further strained by the increase in tariffs and uncertainty driven by U.S.-China trade tensions.

The prevalence of GVCs could amplify the disruptive effects of COVID-19. By slowing or halting the

production and transportation of items needed in other processes, the pandemic and the aggressive controls brought in to contain it increase the risk that critical inputs will be unavailable. Many high-productivity GVC participants rely on just-in-time delivery of inputs and lean inventories. In 2020 these buffers are likely to be limited by the fact that the countries at the center of GVC production have been among the worst-affected by COVID-19 (Figure SF.1.1.A).

Supply shocks tend to be felt most among countries with greater backward linkages, i.e., those whose exports embody imported value-added, such as auto or electronics manufacturers (World Bank 2019b). Demand shocks, by contrast, are more acutely felt by countries with greater forward linkages. This includes, for example, many commodity exporters, which experience a fall in demand from manufacturing centers, which is in turn a reaction to the drop in exports to third countries for the finished goods they produce. Thus far, the steepest declines in activity have been in countries with strong forward linkages, suggesting that the demand factor in the COVID-19 economic shock has been more severe than the supply factor (Figures SF.1.1.B and SF.1.1.C).

How might GVC disruptions amplify the impact of COVID-19?

The propagation of shocks through economic networks and industry interlinkages such as GVCs is historically a major driver of macroeconomic fluctuations (Acemoglu, Akcigit, and Kerr 2015). Global trade, approximately half of which flows through GVCs, is particularly volatile, and tends to fall considerably more than overall activity during crises (Freund 2009; Taglioni and Zavacka 2016). This has been ascribed to several factors. They include the dependence of export-oriented firms on external finance; the strongly cyclical behavior of investment and inventories; and the fact that fiscal stimulus has tended to

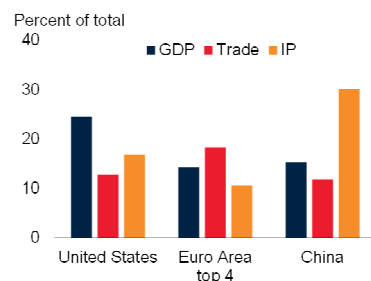
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BOX SF.1 The impact of COVID-19 on global value chains (continued)

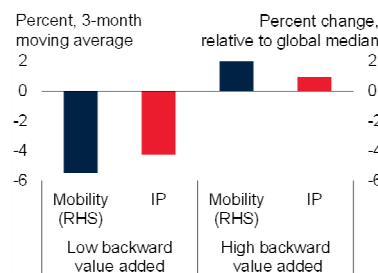
FIGURE SF.1.1 The impact of COVID-19 on GVCs

The countries at the center of the initial waves of the global pandemic are also those at the center of GVC production, which will contribute to a sharp contraction in global trade. Thus far, the steepest declines in trade and industrial production have been concentrated in countries that export more basic intermediate goods for higher value added (i.e., a concentration of forward value added). This is consistent with a greater shock to demand than to supply.

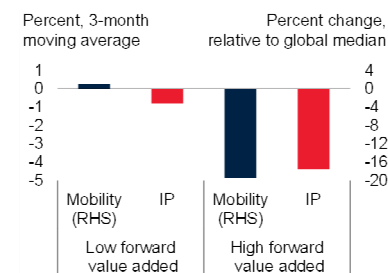
A. Major economies' share of global aggregates



B. Latest mobility and production growth data, by concentration of backward value added in trade



C. Latest mobility and production growth data, by concentration of forward value added in trade



Source: Google; Johns Hopkins University; Organisation for Economic Co-operation and Development; World Bank; World Trade Organization.

Note: GVCs = global value chains. EMDEs = emerging market and developing economies. IP = industrial production.

A. Trade is the average of export and import volumes. "Euro Area top 4" is a weighted average of Germany, France, Italy, and Spain. Sample includes 28 advanced economies and 34 EMDEs, which represent 89 percent of global GDP. Data for GDP and trade are 2019 and industrial production is December 2019.

B.C. Countries are considered to have "low" forward value added if the domestic value added in foreign exports as a share of gross exports is less than 25 percent, and "high" if above 25 percent. The same threshold applies for backward forward value added, in terms of the foreign value added share of gross exports. Last observation for industrial production is March 2020. "Mobility" is the percent change in workplace mobility relative to the global median change for May 21st from baseline, which is the median value for the corresponding day of the week during the 5-week period January 3-February 6, 2020, based on data from Google. Sample includes 32 advanced economies and 23 EMDEs for the Mobility data and 29 advanced economies and 22 EMDEs for IP.

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provide relatively stronger support for non-tradable sectors (Ahn, Amity, and Weinstein. 2011; Bénassy-Quéré et al. 2009; Bricogne et al. 2012; Bussière et al. 2011; Chor and Manova 2012). Sharp declines in trade through GVCs are generally followed by rapid recoveries.¹

The fact that trade flowing through GVCs is highly dependent on just-in-time delivery of critical components from abroad may make it particularly vulnerable to the interruptions of supply caused by regional quarantines, production shutdowns, and border controls implemented to slow the spread of COVID-19. GVCs are likely to amplify the effects of the pandemic through other channels as well. For example, they are particularly prominent in the manufacture of durable goods, purchases of which can be postponed until consumers have more freedom to travel and shop (Taglioni and Zavacka 2016).

Moreover, GVCs in emerging markets tend to be reliant on external U.S. dollar financing, which increases in risk

spreads has made sharply more expensive (Bruno, Kim, and Shin 2018). This would offset the edge in competitiveness arising from the depreciation of their currencies (Boz, Gopinath, and Plagborg-Møller 2018). For regions with significant backward linkages, such as EAP and ECA, the increased cost of imported inputs also reduces the effect of exchange rate depreciation on competitiveness (Ahmed, Appendino, and Ruta 2015). Disruptions to agri-food supply chains could lead to especially severe problems: food insecurity; health risks; and social unrest. Many countries are suffering from shortages of chemicals, fertilizers, and seeds, which are sometimes exacerbated by restrictions on exports by trading partners (World Bank 2020a). These pose a clear threat of smaller harvests, higher food prices, and rising levels of poverty, with the most vulnerable of the world's population most exposed.

Which countries and sectors are more vulnerable?

A global computable general equilibrium (CGE) model illustrates the heterogeneous impact of COVID-19 on

¹ This is known as the "bullwhip effect", and takes place even when the negative shock is largely from demand (Altomonte et al. 2011).

BOX SF.1 The impact of COVID-19 on global value chains (continued)

output and trade, and the transmission channels. It encompasses 20 countries, 7 regional country groups, and 29 economic sectors.² The model incorporates GVCs through input-output linkages and durable relationships in production networks. Shocks applied identically to all countries for one year represent the economic impact of a stylized representation of COVID-19:

- *Employment shock.* A 3 percent drop in employment as factory closures and social distancing force capital and workers into idleness.
- *Trade cost shock.* A 25 percent rise in the costs of all imports and exports, driven by a combination of additional inspections, reduced hours of operation, road and border closures, and increases in transport costs, among other factors. The Ebola crisis, in comparison, caused an estimated 10-percent increase in trade costs for affected countries (Evans et al. 2015).
- *Tourism shock.* A sharp drop in international tourism, equivalent to approximately 25 percent, which aligns with the forecast of the World Travel and Tourism Council for 2020.
- *Services shock.* A 15 percent switch in household demand away from services requiring close human interaction—such as mass transport, domestic tourism, restaurants, and recreational activities—towards consumption of goods and other services.

Short-term implications

The combination of four shocks in the simulation causes a severe global recession. On a sectoral level, services affected by social distancing and tourism experience a sharper decline than agriculture and manufacturing, as they are negatively impacted by all four shocks. Country-specific results show differences reflecting the composition of output and exports by sector and destination, as well as relative levels of openness, reliance on tourism, and endogenous changes in competitiveness. All countries suffer a decline in exports (Figure SF.1.2.A). The EAP and ECA regions are among the worst-affected, consistent with their significant exposure to GVCs and tourism (World

Bank 2020d). Regions that are less integrated through trade and tourism, such as SSA and LAC, are the least affected. On a sectoral level, industries more integrated in GVCs tend to suffer from more severe contractions in activity (Figure SF.1.2.B). This aligns with the results of other simulations (Sforza and Steininger 2020).

Medium- and long-term implications

The shock from COVID-19 comes at the same time as U.S.-China trade relations are once again deteriorating. These shocks may well cause GVC participants to re-assess the viability of existing production networks, and explore whether they should increase the geographical diversification of supply chains, or even reshore production (Freund 2020). Efforts to force reshoring could damage productivity and incomes, especially among EMDEs whose economic development and poverty reduction efforts have benefitted from their participation in GVCs (World Bank 2019b).

The current environment of global recession and heightened risk aversion has been very unfavorable for international trade. This poses a threat to the gains from trade through comparative advantage, specialization, and economies of scale. Regions that are already well-integrated in GVCs should take steps to ensure that they retain, strengthen, or expand their attractiveness as participants in GVCs, including by ensuring the free flow of their manufactured goods across borders. In regions that are not as well integrated, such as MENA, LAC, SAR and SSA, the desire of companies to increase the geographic diversity of their supply chains may provide an opportunity to undertake the structural reforms that would encourage greater integration (Engel, Winkler, and Farole 2016; World Bank 2019c).

Policymakers more generally need to avoid the implementation of trade restrictions that could reverse the global welfare gains, including a large reduction in global poverty, that GVCs have facilitated. Protectionism does not offer a solution to the problems of security of supply highlighted by the pandemic, and countries with more GVC linkages tend to be more reluctant to impose trade barriers (Blanchard, Bown, and Johnson 2017). Shortages would be even more likely in situations where offshore suppliers are shut out, or where domestic suppliers lack the technology and skills available offshore. During the crisis, offshore sourcing has posed less risk to supply in several key sectors than has concentration of production in a few large facilities (e.g., meat packing, medicines)—a reduced reliance on foreign inputs often results in an increased

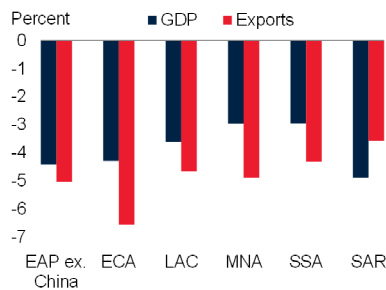
²The model and the simulations are detailed in Maliszewska, Matus, and van der Mensbrugghe (2020). This box describes the paper's amplified global pandemic scenario. The model used is ENVISAGE, calibrated to GTAP Version 10A. It is used in its comparative static specification, and uses 2014 as a reference year.

BOX SF.1 The impact of COVID-19 on global value chains (continued)

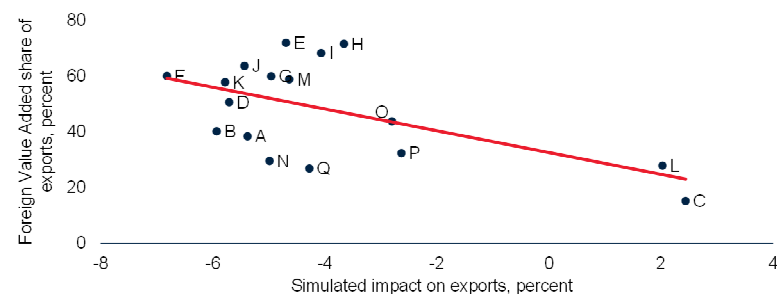
FIGURE SF.1.2 Simulation results

In the modeled scenario, all countries and most sectors suffer a decline in total exports, with the worst-affected regions those that are closely integrated into global trade or dependent on tourism. Using the example of Vietnam, the worst-affected sectors are those with a high share of foreign value added, such as textiles and transport equipment.

A. Regional responses of GDP and exports to modeled COVID-19 shock



B. Sectoral responses in a modeled COVID-19 shock, the case of Vietnam



Source: World Bank.

A.B. "Foreign Value Added share of exports" is the value added of inputs that were imported in order to produce intermediate or final goods/services to be exported. "Impact on GDP" and "Exports" show the change with respect to benchmark in the CGE simulation.

B. Sectors are as follows: A = Agriculture, B = Fishing, C = Mining and Quarrying, D = Food & Beverages, E = Textiles and Wearing Apparel, F = Wood and Paper, G = Petroleum, Chemical and Non-Metallic Mineral Products, H = Metal Products, I = Electrical and Machinery, J = Transport Equipment, K = Other Manufacturing, L = Electricity, Gas and Water, M = Construction, N = Wholesale Trade, O = Transport, P = Post and Telecommunications, and Q = Other Services.

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reliance on domestic inputs, which are also vulnerable to disruption from the pandemic (Bonadio et al. 2020). The most effective way to reduce such risks lies in diversification of sources, which may well include some reshoring, as well as a broadening of foreign sources of

supply. The threat to profitability of GVCs provides in itself a market incentive to encourage transnational firms in this direction. Sound government policies with respect to infrastructure investment and improving governance, education, and public health, would facilitate the process.

regions where tourism accounts for a large share of activity, such as MENA (5.5 percent), EAP (5.2 percent), and ECA (4.8 percent).

Informality and food insecurity. In the average EMDE, informal activity accounts for one-third of output and two-thirds of employment—and considerably more in SSA and SAR. This may magnify both the health and economic impacts from COVID-19 (Chapter 1; Box 1.4). Workers and firms in the informal sector have limited options to buffer temporary income losses, and often depend on daily incomes that are insufficient to permit the accumulation of stockpiles of food or other essential items. Measures to slow the spread of the virus such as social distancing and self-isolation are more

challenging in the crowded settings of the urban poor. The spread of COVID-19 is expected to cause the number of food insecure people to double in 2020, worsening malnutrition and causing permanent developmental damage, especially in SSA where 20 percent of the population is already undernourished (Figure SF.2.D; WFP 2020).

Macroeconomic policy responses

Regional outcomes also depend on countries having the space and ability to adopt and implement an effective policy response. Many EMDEs have taken measures to support

households and firms through severe economic downturns.

Monetary and macroprudential policy measures

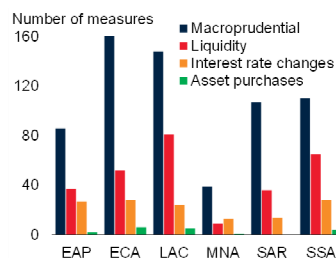
EMDE central banks and governments have implemented a wide range of policy measures to limit the economic and financial fallout of the pandemic (Figure SF.3.A). Prospects of reduced inflationary pressures during the remainder of this year, helped by the collapse in oil prices and weak demand, have aided policy easing efforts in many countries. On aggregate, every region has provided monetary easing through a variety of traditional and novel measures. Central banks have aggressively cut monetary policy rates, with some complementing this easing with unconventional monetary policies such as asset purchase programs—a first for most EMDEs. In addition, they have provided liquidity to help resolve credit crunches, and deployed an arsenal of macroprudential measures to further support lending. While the overall direction of monetary and macroprudential policy has been common across all regions, a considerable degree of variation stems from each region's policy framework and economic circumstances.

- **EAP.** Several economies in EAP implemented conventional monetary policy rate cuts to help support activity (China, Indonesia, Malaysia, Philippines, Thailand, Vietnam). Relatively muted inflation in the region has further aided policy efforts. To ease funding stresses, central banks also provided emergency liquidity to markets (China, Philippines). Indonesia, the Philippines, and Thailand also embarked on asset purchase programs that would buy government securities worth an estimated 1-2 percent of GDP. These measures have been further complemented by a variety of macroprudential measures, including the relaxation of regulatory capital buffers (Indonesia, Malaysia), the lowering of liquidity coverage ratios (Malaysia), and the easing of Basel III net stable funding ratios. Heading into the COVID-19 shock, the banking sector in EAP is better capitalized and its balance sheets are stronger when compared to before the global financial crisis of 2008.
- **ECA.** About two-thirds of central banks in ECA have eased their monetary policy stances (Poland, Russia, Tajikistan, Turkey, Ukraine, Uzbekistan), and several have employed liquidity measures to boost funding conditions (Hungary, Poland, Romania, Serbia, Turkey). In Poland, the central bank has also started an asset purchase program, as have those in Hungary and Turkey. About 80 percent of economies in the region have also adopted macroprudential measures to further support activity. These have included the easing of regulatory capital buffers (Bulgaria, Hungary, Poland, Russia), banking fee reductions (Ukraine), loan repayment holidays (Russia), and mandated capitalization last year's banking sector profits. Although capital ratios today are on average higher than before the global financial crisis, banking sector balance sheets in several ECA economies are more impaired.
- **LAC.** Several economies in LAC aggressively cut their monetary policy interest rates (Brazil, Chile, Mexico, Paraguay, Peru). Brazil's central bank has reduced the policy interest rate by 150 bps since the start of the year, to a historic low of 3 percent, while also easing capital conservation buffers, reserve requirements, and provisioning rules to increase liquidity in the banking system. Mexico's central bank has established several new liquidity facilities for banks to ease constraints and enable lending to firms. The central banks of Brazil and Mexico have also benefited from a newly established temporary swap line with the U.S. Federal Reserve that provides dollar liquidity equivalent to 17 and 32 percent of their international reserves. Colombia and Chile have launched asset purchase programs valued at about 1 and 3 percent of GDP, respectively.
- **MENA.** Many economies in MENA have eased their monetary policy stances (Egypt, Algeria, Morocco, Tunisia). Among the Gulf Cooperation Council (GCC) countries, policy rates have also fallen, reflecting these economies' peg to the U.S. dollar tying changes in their policy stances to that of the

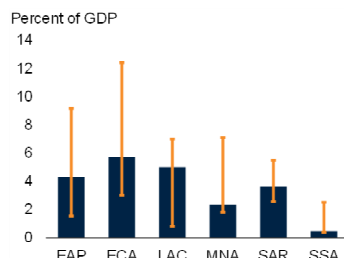
FIGURE SF.3 Policy measures

EMDEs have embarked on unprecedented monetary policy stimulus, including liquidity measures and an array of macroprudential policies. A broad range of fiscal stimulus programs have also been announced that are expected to markedly widen already-large fiscal deficits. Government debt is elevated in some regions, reducing fiscal room to maneuver. Inflation is also expected to exceed central bank targets, weighing on the scope for further monetary policy easing. Banking sectors across EMDE regions are better capitalized today than before the global financial crisis, although some have been grappling with greater balance sheet impairments.

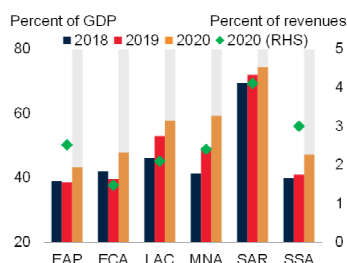
A. EMDE monetary and financial policy measures



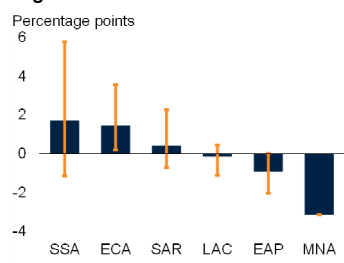
B. Fiscal support measures, by region



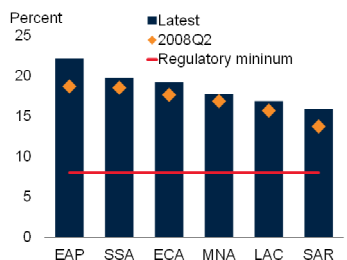
C. Government debt, by region



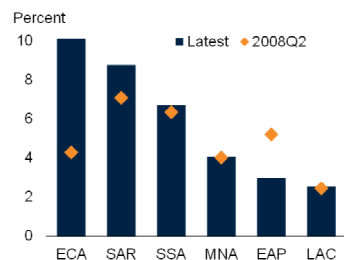
D. Expected inflation deviations from targets in 2020



E. Regulatory capital ratios by region



F. NPLs by region



Source: Bloomberg; Bank for International Settlements; Central Bank News; Consensus Economics; Haver Analytics; International Monetary Fund; Morgan Stanley; World Bank.

Note: EMDE = Emerging Market and Developing Economies, EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.

A. Macroprudential includes prudential methods and measures to support borrowers. Sample includes 120 EMDEs. Last observation is May 27, 2020.

B. Total measures either planned or under consideration as of May 29, 2020. Aggregates are calculated using 2019 nominal U.S. dollar GDP. Orange vertical lines indicate interquartile range. Sample includes 29 EMDEs.

C. Figure shows median for each region. Shaded areas indicate forecasts.

D. Bars reflect the average expected inflation deviation from target in 2020 among EMDEs with inflation targeting regimes. Vertical orange lines indicate interdecile range. Sample includes 56 EMDEs.

E.F. Figures show simple averages for each EMDE group. Due to data limitations, 2008Q2 represents nearest available data no later than 2009Q1. Latest represents most recent data up to 2019Q4.

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Federal Reserve. Some countries have also used macroprudential measures to complement changes in their monetary policy stances. However, scope for further forbearance might be limited, as banking sector capital ratios in many non-GCC MENA economies are vulnerable.

- SAR.** Several central banks in SAR have also lowered policy interest rates, aided by an impending drop in inflation due to falling oil prices (Bangladesh, India, Pakistan, Sri Lanka). These monetary policy actions have been complemented with measures to provide liquidity to financial markets and banking systems in several economies. In India, the central bank has been purchasing government bonds to further ease financial conditions. In Bangladesh, the central bank lowered the cash reserve ratio and announced purchases of government securities from banks. Some economies have also reverted to macroprudential measures to free up capital in the banking system and help support borrowers. These have included loan repayment holidays (Bhutan, Sri Lanka), easing of regulatory capital buffers (India), and lowering of liquidity coverage ratios (Sri Lanka). Non-performing loan ratios in SAR are however among the highest across EMDEs, on average—reflecting existing financial sector weaknesses. These could limit the scope for further regulatory forbearance in some economies.
- SSA.** Monetary policy stances have also been aggressively eased in SSA (Democratic Republic of Congo, Ghana, Kenya, Mauritius, South Africa), despite expectations that inflation will edge up this year due to sharp currency depreciations and higher food prices. Others have lowered reserve requirements to free up liquidity (Botswana, Mozambique), implemented asset purchase programs (Rwanda, South Africa), or deployed a variety of macroprudential policies to enable financial institutions to support distressed borrowers (the Central Bank for the West African Economic and Monetary Union, and the Central Banks of Ghana, Madagascar,

Nigeria). Although several countries' banking sectors have stronger capital positions today than before the global financial crisis (Ghana, Kenya, Rwanda, South Africa), banking sector capitalization is slightly weaker in the region on average—potentially limiting the scope for leveraging macroprudential policies to provide further support to activity.

Fiscal policy measures

EMDEs have also implemented a wide range of fiscal stimulus programs equivalent to around 5 percent of GDP in the EMDEs where they have been announced (Figure SF.3.B). These measures have been targeted at confronting the immediate health crisis, as well as to limit the magnitude of the economic contraction and to provide support for the eventual recovery, and have included expansion of social protection, cash transfers to households, increased access to unemployment benefits, and wage subsidies to firms to protect jobs. To further support firms, policymakers have also provided access to credit, loan guarantees, and vouchers or cash for critical employers and affected sectors such as tourism. However, elevated debt-to-GDP ratios and large fiscal deficits in many EMDEs is constraining their room to aggressively ease fiscal policy—particularly among some industrial commodity exporters, reflecting the loss of revenue due to the collapse in commodity prices. Although most EMDEs have managed to implement discretionary fiscal support packages, those with more fiscal space have generally provided greater support.

- **EAP.** Several countries in EAP have announced large fiscal stimulus packages to help support activity. Measures in China totaled 5.4 percent of GDP and included tax breaks and deferrals and special central and local government bond issuances. Malaysia and Thailand have both implemented extraordinary policy support packages equivalent to around 17 and 13 percent of GDP respectively, which included direct fiscal stimulus packages of about 6 percent of GDP in both countries. The remainder covers health care, public welfare and the expansion of social protection, and other

business support initiatives. Indonesia and the Philippines have both announced sizable fiscal stimulus packages that range between 3-5 percent of GDP, which includes targeted support to vulnerable groups. Sharply higher spending is expected to contribute markedly to widening fiscal deficits in the region this year, with the median deficit expected to increase to 5 percent of GDP, from 2.2 percent in 2019.

- **ECA.** Sizable fiscal measures have also been announced in ECA—the fiscal deficit of the median economy is projected to widen from 1 percent in 2019 to 6.8 percent of GDP in 2020. In Poland, an economic package of around 12 percent of GDP will be aimed at boosting health care, expanding social protection coverage, supporting wages, and providing loan guarantees and credit extensions. Measures in Turkey amount to 9 percent of GDP and include increased health care spending, support for utility payments, and increased social protection. In Georgia, announced fiscal measures are equivalent to 3 percent of GDP over the next few years and include additional health spending, support for the tourism sector, accelerated and increased VAT refunds, a moratorium on tax payments for low-income earners, subsidized utility costs of the poor, and unemployment subsidies. In Kazakhstan, fiscal measures—on and off-budget—amount to 5.7 percent of GDP, while several other economies in the region have announced similar measures that range between 2-7 percent of GDP. These include increased health care spending (Armenia, Azerbaijan, Russia, Tajikistan, Uzbekistan), tax payment deferrals (Azerbaijan, Albania, Russia), support for utility payments (Armenia), and employment protection (Armenia, Albania, Kazakhstan, Russia), and expansion of social protection coverage (Armenia, Azerbaijan, Kyrgyz Republic, Russia, Uzbekistan).
- **LAC.** The median fiscal deficit in the region is expected to nearly double this year to 5.2 percent of GDP. Brazil's announced fiscal package of more than 8 percent of GDP

includes income support measures for vulnerable groups, tax deferrals, and loan guarantees, among others. Peru has announced a fiscal package equivalent to 7 percent of GDP, which includes direct transfers to poor households, deferrals of tax payments, and utility-payment support, among others. Fiscal measures in the region have targeted a range of areas, including health spending (Argentina, Chile, Guatemala), tax payment deferrals (Chile), tax cuts (Jamaica), and loans or credit guarantees to SMEs (Argentina, Chile), and enhanced employment protection (Argentina, Chile, Guatemala). Governments in Mexico, Paraguay, and Honduras, and Uruguay have provided support for SMEs, including through the provision of additional resources to their development banks and other financial institutions. Fiscal support has also included the expansion of social protection coverage (Argentina, Brazil, Peru). In Brazil, limited fiscal space has required reallocation of expenditures toward income support and health spending.

- **MENA.** Announced fiscal policy responses have ranged between 1 and 13 percent of GDP in MENA—a region hit hard by both the pandemic and the collapse in oil prices. As a result, fiscal deficits in the region are expected to widen to 10 percent of GDP in 2020, from 3.1 percent in 2019, on average. In the GCC economies, measures have included health spending and social protection spending increases, employment protection measures, and support for service sectors like tourism. In several GCC economies (e.g., Qatar, Saudi Arabia, United Arab Emirates), packages also specifically provided relief for small and medium-sized enterprises. In non-GCC economies (e.g., Egypt, Iran), measures have focused on health spending, cash transfers, and social protection. With the collapse in oil prices weighing further on fiscal positions in MENA, some support packages have entailed budgetary reallocations (Algeria, Saudi Arabia).
- **SAR.** In SAR, India, Pakistan, and Bangladesh

have announced fiscal, liquidity, and loan support measures, ranging from 3 to 10 percent of GDP. Measures in India include spending on health care to bolster the COVID-19 response, wage support, in-kind and cash transfers to lower-income households, deferral of tax payments, as well as loan and liquidity support for small businesses and financial institutions. In Pakistan, measures also include additional spending on health care, cash transfers, and relief of utility payments. The fiscal support package in Bangladesh includes subsidies on interest payments for loans to businesses, loan guarantees equivalent to almost 2 percent of GDP, food distribution, targeted cash transfers to the poor, additional procurement of rice and paddy, and an agricultural lending program. The median fiscal deficit in SAR is foreseen to widen from 5.4 percent of GDP in 2019 to 6.9 this year.

- **SSA.** Several countries in SSA have announced various fiscal measures to support activity and buttress health sector responses to the pandemic. However, given binding fiscal policy constraints, these measures have mostly been smaller than in other EMDE regions and often involved reprioritization of existing budgets (Cabo Verde, Nigeria, Zimbabwe). The median fiscal deficit in the region is projected to reach 5.1 percent of GDP this year, almost doubling from 2019. Despite severely constrained fiscal space and a recent sovereign rating downgrade to sub-investment grade, the South African government has announced a near 10 percent-of-GDP fiscal support package, which includes loan guarantees—equivalent to almost 4 percent of GDP—measures to strengthen the health sector, bolster sanitation infrastructure, and relieve social distress, as well as tax relief. Announced fiscal support in Ethiopia equivalent to close to 2 percent of GDP will boost health care spending and assist in emergency food distribution. In the Republic of Congo, the government's 1.6 percent-of-GDP fiscal package is targeted at bolstering the health system and includes tax payment deferrals.

To help alleviate funding shortfalls among the world's poorest economies, many of which are in SSA, the World Bank and the IMF have called on bilateral creditors to suspend debt payments from fiscally constrained countries. Both institutions have also made emergency support packages available to assist governments; however, given the scale of the pandemic, further external assistance from the broader global development community is imperative.

Limitations on policy room to maneuver

Many economies have limited room to implement additional fiscal and monetary stimulus. EMDE government debt has risen sharply over the last decade, rising to above 60 percent of GDP in one-third of EMDEs by 2019, while fiscal deficits were wider than 3 percent of GDP in 40 percent of countries (Figure SF.3.C). Although inflation among EMDEs is expected to moderate as a result of the pandemic, inflation in many EMDEs is projected to remain above central bank targets, constraining these economies' ability to ease their monetary policy stances further (Figure SF.3.D). In general, EMDE banking sectors were better capitalized in 2019 than they were before the global financial crisis in 2008; however, elevated balance sheet impairments in some regions could weigh on banks' ability to extend much-needed credit to firms and households during the COVID-19 crisis, and could put financial stability at risk (Figures SF.3.E and SF.3.F).

- **EAP.** Banking sectors in EAP are the best capitalized on average of all EMDE regions, with the average regulatory capital to risk-weighted assets ratio around 22 percent. However, banking sectors in the region also have the highest loan-to-deposit ratios of all EMDE regions, suggesting an increased likelihood of liquidity constraints arising in the event of severe funding stress.
- **ECA.** Debt levels in a number of ECA economies are below that of the average EMDE, facilitating the implementation of large fiscal stimulus packages. However, the fall in revenues as a result of the decline in commodity prices is expected to reduce fiscal space in the third of the region's economies that are industrial commodity exporters (Azerbaijan, Kazakhstan, Russia, Tajikistan, Turkmenistan). In some countries, however, elevated shares of foreign-currency-denominated debt could leave their debt burdens vulnerable to sharp depreciations. In over one-half of economies in ECA—particularly among oil exporters—inflation is expected to exceed its target next year by a greater margin than the EMDE median, likely constraining further easing of monetary policy.
- **LAC.** A few LAC economies have weak foreign reserve buffers, with the region's economies accounting for one-quarter of those EMDEs in the bottom quartile for reserves-to-imports cover. There is wide heterogeneity, however, as countries like Brazil have strong reserve buffers. Reserve buffers in some countries with fixed exchange rates, such as the Caribbean islands, have also come under severe pressure amid the international financial turmoil. A number of countries in LAC also have large external financing requirements, exacerbating the limitations of low reserves.
- **MENA.** The region's disproportionate exposure to the collapse in oil prices is expected to weigh heavily on fiscal balances as government revenue is bound to drop steeply, constraining the room for significant countercyclical fiscal stimulus. Fiscal deficits are expected to widen to beyond 9 percent in 2020—from around 4 percent in last year. As a result, median government debt is expected to rise 10 percentage points this year, with debt-to-GDP ratios in about half of the region's economies being in the worst quartile for EMDEs.
- **SAR.** Although banking sectors in SAR are well capitalized relative to regulatory requirements, capital adequacy ratios are the lowest among EMDE regions, on average. Even before the pandemic, credit extension was slowing in some countries (Bangladesh, India). Non-performing loan ratios in SAR are among the highest of all EMDE regions.

In about 90 percent of the region's economies, non-performing loan ratios exceed that of the EMDE median. This weighs heavily on the banking sector's ability to provide credit during the current downturn. High debt burdens in a number of countries are also constraining fiscal space.

- **SSA.** Around 40 percent of economies in the worst quartile for government debt are in SSA. In addition, half of the EMDEs in the worst quartile for government debt-to-revenue ratios—a crude indication of the years of revenue needed to repay debt—are in the region. Many countries in SSA also have limited foreign reserve buffers, with the median economy having enough reserves to cover 3.5 months of imports.

Prospects for per capita growth and poverty

Nearly 80 percent of EMDEs are expected to register negative growth—the highest share on record (Figure SF.4.A). In general, forecast downgrades are larger and the recessions are deeper in EMDE regions with the most severe COVID-19 outbreaks or those most susceptible to global spillovers, such as economies that are heavily dependent on tourism, economies deeply embedded in global value chains, and major exporters of industrial commodities (Figure SF.4.B). LAC and ECA have large downgrades partly because of the size of their domestic outbreaks and exposure to global spillovers, while South Asia's substantial downgrade is primarily the result of stringent lockdown measures.

Per capita incomes among more than 90 percent of EMDEs are expected to contract in 2020—markedly affecting living standards and likely causing many millions to fall back into poverty across all EMDE regions (Figure SF.4.C and D; Lakner et al. 2020; ILO 2020; World Bank 2020b). Per capita income losses are forecast to be steepest in ECA, LAC, MENA, and SSA. These four regions are home to many oil exporters, which will be severely affected by the precipitous fall in oil prices (see Chapter 4).

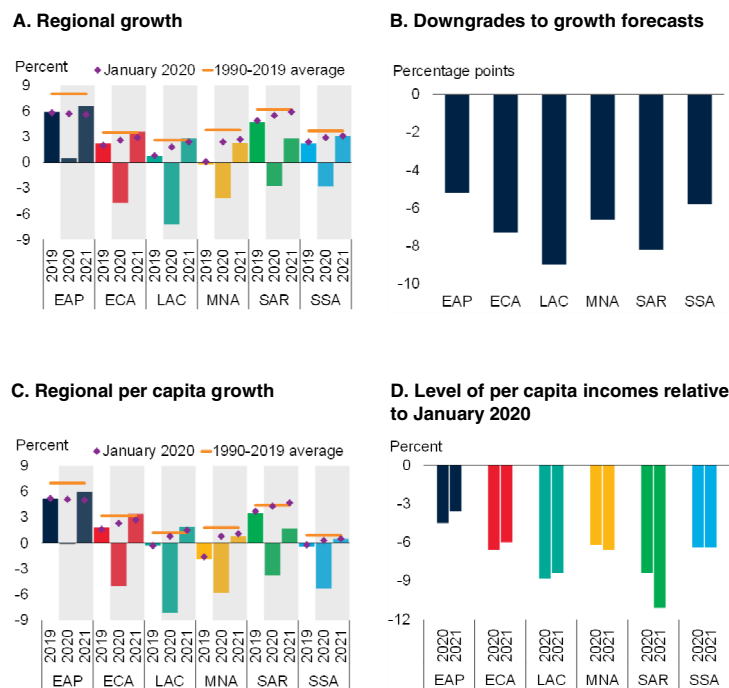
- **EAP.** Regional growth is projected to slow sharply from 5.9 percent in 2019 to 0.5 percent in 2020—the lowest rate since 1967—with sizable policy support preventing a more severe deceleration. Although subject to significant uncertainty, regional growth is expected to rebound to 6.6 percent in 2021. Per capita incomes are forecast to contract by 0.1 percent, on average, this year—the weakest performance and first contraction since 1968—before rebounding to 6 percent in 2021. Over the last 30 years, per capita income growth in EAP has averaged 7 percent. Falling per capita incomes amid the COVID-19 pandemic is likely to have a devastating impact on poverty and welfare in the region (Lakner et al. 2020; World Bank 2020b).
- **ECA.** Regional economies are forecast to contract by 4.7 percent in 2020—the steepest fall since the 5 percent contraction during the global financial crisis—with recessions in nearly all ECA economies. The outlook assumes that containment and mitigation measures are gradually lifted by the start of the second half 2020. Growth in ECA is projected to recover to 3.6 percent in 2021, as the economic effects of the pandemic gradually wane and the recovery in trade and investment gathers momentum. Per capita incomes in 2020 are projected to contract 5 percent. Although extreme poverty is less prevalent in ECA than in other EMDE regions—about 6 million people in the region live in extreme poverty, or 1.2 percent of the population—the steep decline in per capita incomes is expected to raise the poverty headcount (Lakner et al. 2020).
- **LAC.** The regional economy is projected to shrink by 7.2 percent in 2020—the most of all EMDE regions and a much steeper decline than during the global financial crisis—reflecting measures to slow the domestic spread of the pandemic, significant deterioration in financing conditions and commodity prices, and spillovers from a global recession. As mitigation measures are scaled back and financing, commodity price,

and external demand conditions become more supportive, regional growth is projected to recover to 2.8 percent in 2021. The implied 8.1 percent drop in per capita incomes this year will also be the steepest among all EMDE regions. This sharp contraction in per capita incomes is likely to cause millions to lapse into extreme poverty, as many of those who escaped poverty in recent years are still vulnerable to falling back into it (World Bank 2020d).

- MENA.** Activity in the region is expected to contract by 4.2 percent in 2020, as consumption, exports, and services activity like tourism are severely disrupted by the COVID-19 pandemic, and in oil exporters, export and fiscal revenues collapse with the plunge in oil prices. Regional growth is expected to resume in 2021-22 as the impact of the pandemic fades and investment improves. Per capita GDP in MENA is expected to contract by 5.8 percent this year—the steepest contraction among EMDE regions after LAC—reflecting the region’s disproportionate exposure to the oil price collapse. It will also be the fourth consecutive year in which per capita incomes in for the region as a whole have fallen. Although per capita growth is expected to recover to 0.8 percent in 2021, it will remain below the long-term average, as the region is foreseen to continue struggling with macroeconomic fragility (World Bank 2020e).
- SAR.** Activity in the region is projected to shrink by 2.7 percent in 2020. Consumption and services activity have been severely hindered by pandemic mitigation measures. The depth of the global contraction will also weigh substantially on SAR activity, despite more modest trade linkages with advanced economies compared to other EMDE regions. Growth in 2021 is projected to recover to 2.8 percent as pandemic mitigation measures are rolled back and manufacturing and services activity resume. An expected tapering of global headwinds is expected to further support recovery of activity in the region. SAR is expected to experience a reduction of per capita incomes of 3.8 percent in 2020, the

FIGURE SF.4 Prospects for growth, per capita incomes and poverty

Nearly 80 percent of EMDEs are expected to register negative growth this year, with the deepest regional contractions in ECA, LAC, and MNA. Revisions to growth forecasts have been substantial across all EMDE regions. The decline in per capita incomes due to the fall in activity is expected to be even steeper and could cause many millions to fall back into extreme poverty.



Source: World Bank.
 Note: EMDE = Emerging Market and Developing Economies, EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.
 A.C. Bars denote latest forecast; diamonds correspond to January 2020 forecasts in the *Global Economic Prospects* report. Average for 1990-2019 is constructed depending on data availability. For Europe and Central Asia, the long-term average uses data for 1995-2019 to exclude the immediate aftermath of the collapse of the Soviet Union. Aggregate growth rates calculated using GDP weights at 2010 prices and market exchange rates. Shaded areas indicate forecasts.
 A. Since the largest economies account for about 50 percent of GDP in some regions, weighted averages predominantly reflect the developments in the largest economies in each region.
 B. Figure shows the downgrade in regional GDP forecasts in 2020. Sample includes 145 EMDEs.
 D. Bars show the percent difference between the level of per capita GDP in the January and June 2020 editions of *Global Economic Prospects*. Sample includes 144 EMDEs.
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first contraction since 1979. Per capita income growth is forecast to rebound to 1.7 percent next year, but remain well-below the long-term average of 4.4 percent.

- SSA.** Activity in the region is expected to contract by 2.8 percent this year—the deepest contraction on record and 5.8 percentage points weaker than previous forecasts. Efforts to contain the spread of the virus have disrupted the functioning of domestic

economies, and will be compounded by sharply lower growth in major trading partners and the collapse in commodity prices. Growth in the region is expected to rebound to 3.1 percent in 2021; however, the outlook is subject to substantial uncertainty. Per capita GDP this year is projected to fall by 5.3 percent, likely causing millions to fall back into extreme poverty. With the region already home to about 60 percent of the world's extreme poor, this rise is bound to further concentrate global poverty in the region (Lakner et al. 2020; World Bank 2020a).

Risks

Given the size and unprecedented nature of the COVID-19 shock to the global economy, any numerical forecast for the period ahead is subject to an unprecedented level of uncertainty. Downside risks to the outlook predominate for all EMDE regions and could lead to a substantially greater loss of output in the near term if they materialize. Several risks common to all regions are discussed in Chapter 1. These include a longer-than-expected pandemic, financial crises, and a retreat from global value chains. These risks are global in nature, notwithstanding a degree of regional variation in their impact. For example, the likelihood of more persistent outbreaks of COVID-19 is higher in regions with weaker health systems, financial crises are more likely and more damaging in regions burdened with higher debt, and a global retreat from value chains would be more damaging for regions that are tightly integrated in world trade. In addition to these global risks, there are also myriad risks specific to each region.

- **EAP.** Key risks include the possibility of a second wave of the outbreaks, which would renew pressure on countries' health care systems and interrupt the recoveries which have begun in countries that have largely brought domestic outbreaks under control. Moreover, it remains to be seen whether the policy accommodation being provided will be sufficient to prevent a more severe deterioration in confidence, investment, and trade. Finally, a renewal of trade tensions between the United States and China would cause renewed disruption to trade, and increase existing pressures on the supply of intermediate goods.
- **ECA.** An even sharper-than-expected slowdown in the Euro Area, perhaps from a worsening of the pandemic or more prolonged mitigation measures, could amplify the negative spillovers from the region, including through global value chains, as well as through commodity, financial, and remittance channels. With remittances accounting for 10 percent of GDP in the region, a sharp fall could amplify the regional economic downturn. Similarly, a prolonged deterioration in global investment sentiment could have material implications for the region if it weighs on foreign direct investment.
- **LAC.** Downside risks to the outlook in LAC include a resurgence of last year's wave of social unrest, increasingly adverse market reactions to rising public debt, weaker-than-expected commodity prices, and persistent pandemic-related uncertainty slowing the recovery of the services sector. In addition, LAC faces persistent risks related to natural disasters and weather-related events. A major natural disaster on the heels of the COVID-19 pandemic would be economically devastating for some countries in the region.
- **MENA.** The recent sharp decline in oil prices and the continued high uncertainty about their future path pose an important downside risk to the region's outlook. More widespread COVID-19 outbreaks could exact a significant humanitarian toll, especially among the fragile economies where forced displacement and insecurity leave populations already highly vulnerable. In addition to the effects of the pandemic, conflict-related risks in MENA remain high.
- **SAR.** The regional spread of COVID-19 could have especially severe humanitarian consequences given the region's high population, large informal sectors, high inequality, and underdeveloped health systems. An intensification of financial market stress

would add further pressure to financial sector balance sheets already burdened with existing vulnerabilities, including high levels of non-performing loans. Financial stress also risks risk saddling governments with contingent liabilities should bailouts be needed, with adverse implications for public debt sustainability. While the region is an oil importer, further volatility in oil prices could curtail remittance flows from South Asian expatriate workers in Gulf economies.

- **SSA.** The region is especially vulnerable to a larger and longer lasting downturn given the weakness of its health care systems, constrained fiscal policy space, and its limited capacity to effectively implement social-distancing measures. SSA is at risk of debt distress given high levels of debt and sharply higher borrowing costs. There are also growing concerns that border closures and trade-restrictive policies may cause a food security crisis in the region.

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